

# PATENT ABSTRACTS OF JAPAN

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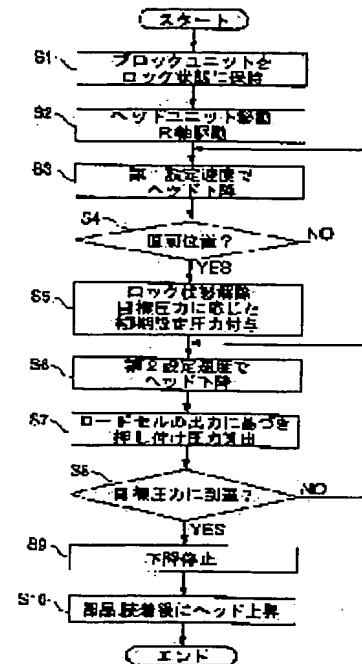
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## (54) SURFACE-MOUNTING DEVICE

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To effectively control pressuring force using a simple configuration by keeping the reaction of the pressurizing force from acting directly on a load cell.

**SOLUTION:** A block unit 31 combined to a suction head 20 is supported by a frame 24, which is raised/lowered by a Z-axis servomotor 26 via a ball screw axis 22 for relative movement in the vertical direction. Except when a pressure is controlled, a piston rod 27a of an air cylinder 27 is lowered, so that the block unit hits a lower-side stopper 28b for constraint. When pressure is controlled, an elastic restoring force of a compression spring 35 is applied to a load cell 29 as an initial set pressure, by controlling the air pressure which moves the piston rod. When a part P hits a substrate T and receives downward reaction force, the pressure applied on the load cell is reduced, and the reduced amount is detected as a pressurizing force.



## LEGAL STATUS

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